

WHAT IS CLAIMED IS:

1. A method for treating or preventing a pathophysiological state of an organ in an individual wherein said state is characterized by an undesirable level of cyclin-dependent kinase inhibitor activity in said organ, comprising the step of regulating the expression of the *p21* gene in said organ of said individual.

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2. The method of claim 1, wherein said organ is selected from the group consisting of kidney, heart, liver, and lung.

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3. The method of claim 1, wherein said pathophysiological state is selected from the group consisting of renal fibrosis, glomerulosclerosis, reduced filtration rates, hypertension, and organ transplantation rejection.

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4. The method of claim 1, wherein the regulation of the expression of the *p21* gene results in the reduction or elimination of the expression of the *p21* gene.

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5. The method of claim 4, wherein the reduction or elimination of the expression of the *p21* gene is performed by a technique selected from the group consisting of drug therapy, and genetic manipulation.

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6. A method for treating or preventing chronic progressive renal failure in an individual, comprising the step of regulating the expression of the *p21* gene in one or both kidneys of said individual wherein said regulation of the *p21* gene results in the manipulation of cyclin-dependent kinase inhibitor activity in one or both kidneys.

7. The method of claim 6, wherein the regulation of the expression of the *p21* gene results in the reduction or elimination of the expression of the *p21* gene.

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8. The method of claim 7, wherein the reduction or elimination of the expression of the *p21* gene is performed by a technique selected from the group consisting of drug therapy, and genetic manipulation.

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9. A method of lowering the rate of long-term rejection of a transplanted organ in an individual comprising the step of transplanting into said individual the organ from a donor wherein the *p21* gene in said organ is not expressed.

10. The method of claim 9, wherein said organ is selected from the group consisting of kidney, heart, liver, and lung.